UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,211	02/16/2000	Mark J. Buxton	042390.P7983	5977

7590 12/04/2003	**EXAMINER**
BLAKELY SOKOLOFF TAYLOR & ZAFMAN, LLP	TRAN, ELLEN C
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Los Angeles, CA 90025	

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/505,211	BUXTON, MARK J.
	Examiner	Art Unit
	Ellen C Tran	2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *16 February 2000*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-33* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

NORMAN M. WRIGHT
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1.   This action is responsive to communication: original application filed

16 February 2000.

2.   Claims 1- 33 are currently pending in this application. Claims 1, 6, 12, 17, 23

and 32 are independent claims.

Oath/Declaration

3.   The oath is objected to as being informal. It lacks authentication by a diplomatic

or consular officer of the United States; 37 CFR 1.66(a). This informality can be

overcome either by forwarding the original oath to the appropriate officer for

authentication or by filing either a declaration under 37 CFR 1.68, or a new properly

authenticated oath under 37 CFR 1.66. The new oath or declaration must properly

identify the application of which it is to form a part, preferably by application number and

filing date in the body of the oath or declaration. If, however, authentication of the

original oath is desired, applicant should request return of the oath for this purpose.

Such request must be accompanied by an order for a copy of the oath to be retained in

the file until the properly authenticated oath is returned. After the oath has been

authenticated, it should be returned promptly to the Patent and Trademark Office. See

MPEP §§ 602.01 and 602.02.

        It does not include the notary's signature.

        It does not include the notary's seal and venue.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   **Claims 1-3, 6-9, 12-14, 17-20, and 23-33** rejected under 35 U.S.C. 103(a) as

being unpatentable over Wool, U.S. Patent No. 6,373,948 (hereinafter '948), further in

view of Aras et al., U.S. Patent No. 5,872,588 (hereinafter '588).

-      **As to independent claims 1 and 12,** "a storage medium having a plurality of

machine readable instructions" is disclosed in '948 col. 18, lines 7-8 "a computer

readable medium having computer readable program code means embodied thereon,

said computer readable program code means comprising" and "A method of content

level filtering and distribution of digital content" is disclosed in '948 col. 9, lines 53-67

"utility of the present invention, care must be taken to ensure that the program identifier,

p, assigned to programs with related content".

-      "sending the digital content to the receiver for subsequent rendering when

the receiver is trusted" is disclosed in '948 col. 1, lines 7-13 "transmitted programming

content, and more particularly, to a system for transmitting an encrypted program

together with a program identifier which is used by a set-top terminal, together with

stored entitlement information, to derive the decryption key necessary to decrypt the

program";

- "applying the mask to the digital content to generate content after mask applied data" is disclosed in '948 col. 10, lines 11-12 "Program identifiers, p, are assigned to programs in the topic hierarchy 600 using the notion of prefix masks"

- "sending the content after mask applied data to the receiver for subsequent rendering of the content" is shown in '948 col. 9, lines 2-3 "transmit the program with the program identifier, p".

'948 **teachings do not disclose** the following text below in italics:

- "a *method of "obtaining the digital content and a mask for obfuscating a selected portion of the digital content"* **however '588 explains this** in col. 10, lines 18-20 "Thus, objectionable language may be silenced when the video portion is presented";

- "determining if a receiver of the digital content is trusted" is taught in '588 col. 10, lines 21-24 "when home station determines that AVM are to be screened".

- It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of '948, that explain how content level filtering occurs in a content distribution system. One of ordinary skill in the art would have been motivated to perform such a modification because content filtering is desired for parental control features. As indicated by '948 (see col. 10, lines 9 et seq.) "The RATING 217 and CATEGORY 219 fields as shown in AVI-EC 209 are particularly useful when the home station contains a screening or parental control feature to filter AVM presentations".

6.   **As to dependent claims 2 and 13** "digital content comprises video data and the mask comprises a replacement...one or more frames of video data" is disclosed in '588 col. 10, lines 26-30 "or obscure it in a way that allows the subscriber to follow the plot but not be presented with the objectionable material".

7.   **As to dependent claims 3 and 14** *"digital content comprises audio data and the mask comprises a replacement audio clip"* is disclosed in '588 col. 10, lines 18-21 "Thus objectionable language may be silenced while".

8.   **As to independent claims 6 and 17** "a storage medium having a plurality of machine readable instructions" is disclosed in '948 col. 18, lines 7-8 "a computer readable medium having computer readable program code means embodied thereon, said computer readable program code means comprising" and "A method of content level filtering and distribution of digital content" is disclosed in '948 col. 9, lines 53-67 "utility of the present invention, care must be taken to ensure that the program identifier, p, assigned to programs with related content".

     -   "obtaining the digital content and a mask for obfuscating" '588 explains this in col. 10, lines 18-20 "Thus, objectionable language may be silenced when the video portion is presented";

     -   "determining if a channel for distributing the content is trusted" 588 col. 10, lines 21-24 "when home station determines that AVM are to be screened";

     -   "when the channel is not trusted ... applying the mask to the digital content to generate content after mask applied" is disclosed in col. 10, lines 11-12 "Program

identifiers, p, are assigned to programs in the topic hierarchy 600 using the notion of prefix masks"

- "encrypting the masked content" is disclosed in '948 col. 1, lines 7-13 "transmitted programming content, and more particularly, to a system for transmitting an encrypted program together with a program identifier which is used by a set-top terminal, together with stored entitlement information, to derive the decryption key necessary to decrypt the program";

- "decrypting the masked content, and reversing masking to reproduce original content" is taught in '948 col. 1, lines 41-43 "provides the customer with a set-top terminal (STT) containing one or more decryption keys which may be utilized to decrypt programs that a customer is entitled to";

- "sending the content after mask applied data to the receiver for subsequent rendering ... when the receiver is not trusted" is taught in '948 col. 1, 43-44 "In this manner, the set-top terminal receives encrypted transmission and decrypts the programs that the customer is entitled to, but nothing else".

9.   **As to dependent claims 7 and 18** "when the channel is trusted ... determining if a receiver of the digital content is trusted" is taught in '588 col. 10, lines 21-24 "when home station determines that AVM are to be screened";

- "sending the digital content to receiver for subsequent rendering when the receiver is trusted" is disclosed in '948 col. 1, lines 7-13 "transmitted programming content, and more particularly, to a system for transmitting an encrypted program together with a program identifier which is used by a set-top terminal, together with

stored entitlement information, to derive the decryption key necessary to decrypt the program";

- "applying the mask to the digital content to generate content" is disclosed in ⁱ94 ⁸⁾ col. 10, lines 11-12 "Program identifiers, p, are assigned to programs in the topic hierarchy 600 using the notion of prefix masks";

- "after mask applied data and sending the content after mask applied data" is shown in '948 col. 9, lines 2-3 "transmit the program with the program identifier, p";

- " receiver for subsequent rendering of the content after mask applied data when the receiver is not trusted" is disclosed in '948 col. 1, lines 7-13 "transmitted programming content, and more particularly, to a system for transmitting an encrypted program together with a program identifier which is used by a set-top terminal, together with stored entitlement information, to derive the decryption key necessary to decrypt the program".

10.   **As to dependent claims 8, 9, 19, and 20** the claims have the same language as used in claims 2, 3, 13, and 14 and respectively therefore are similarly rejected under the same rationale noted in paragraphs 6 and 7.

11.   **As to independent claim 23,** "A system providing content level filtering" is disclosed in '948 col. 9, lines 53-67 "utility of the present invention, care must be taken to ensure that the program identifier, p, assigned to programs with related content";

- "distribution of digital content" is taught in col. 9 lines 2-3 "transmit the program with the program identifier, p";

- "a content censor to identify regions of content to obfuscate" and " a mask generator to accept the content and regions and produce a mask to apply to the content to obfuscate" '588 explains this in col. 10, lines 18-20 "Thus, objectionable language may be silenced when the video portion is presented";

12.   **As to dependent claim 24,** "The system of claim 23, wherein the mask generator links the content with the regions…to produce content after mask applied" and "encrypts the masked content" is taught in '948 col. 5 lines 26-29 "if a customer is entitled to a particular program, the se-top terminal 300 will be able to derive the program key, Kp, from stored and received information".

13.   **As to dependent claim 25,** "The system of claim 23, further comprising a distributor to transmit the content and the mask to a receiver" is disclosed in '948 col. 1, lines 3-5 "to a system for transmitting an encrypted program together with a program identifier which is used by a set-top terminal".

14.   **As to dependent claim 26,** "The system of claim 23, further comprising a distributor to transmit content after mask applied to a receiver" is disclosed in '948 col. 1, lines 3-5 "to a system for transmitting an encrypted program together with a program identifier which is used by a set-top terminal".

15.   **As to dependent claim 27,** "The system of claim 23, further comprising a distributor to transmit content after mask applied data and encrypted masked content to a receiver" is disclosed in '948 col. 1, lines 3-5 "to a system for transmitting an encrypted program together with a program identifier which is used by a set-top terminal".

16.   **As to dependent claim 28,** "The system of claim 23, wherein the receiver

comprises a masker to apply the mask to the content to produce content after mask

applied data for rendering by the receiver" is taught in '588 col. 10, lines 12-13 "when

the home station contains a screening or parental control feature to filter AVM

presentations".

17.   **As to dependent claim 29,** "The system of claim 27, wherein the receiver

comprises a decryptor to decrypt the encrypted masked content and a de-masker to

reverse masking of the content after mask applied data to reproduce original content for

rendering by the receiver"   '948   col \   \re- 41-43

18.   **As to dependent claim 30,** "The system of claim 23, further comprising a

content creator to create the digital content" is disclosed in '948 col. 1, lines 10-14

"which is used by a set-top terminal, together with stored entitlement information, to

derive the decryption key necessary to decrypt the program".

19.   **As to dependent claim 31,** "The system of claim 23, wherein the content censor

comprises a region identification tool to identify a region of the digital content to

obfuscate" is taught in '588 col. 10, lines 21-25 "The screener mechanism may work in

cooperation with an obscuration mechanism such that when home station with an

obscuration mechanism such that when home station determines that AVM to be

screened an obstruction mechanism is invoked to modify or blank the presentation of

the AVM".

20.   **As to independent claim 32,** "A method of distributing digital content in a

hierarchical content distribution system" is disclosed in '948 col. 4 lines 21-23 "FIG. 6

illustrates a representative topic hierarchy utilized by the head-end server of FIG. 2 to

organize programs in a manner that allows programs with related content";

'588

-    "determining a security of a transmission channel" is disclosed in ~~948~~ col. 22,

line 60 – col. 23, line 9 "collecting behavior information on channels that do not provide

AVI information ... one or more channels may not have AVI information embedded in

the AVM ... when no AVI information is available the home station may store the

appropriate channel designation along with a code that indicts that the AVI information

was unavailable";

,588

-    "determining a mode of content distribution" is disclosed in ~~555~~ col. 2 lines

46-56 "Since the viewed material may be received through a variety of channels

controlled by more than one source ... Consequently, there remains a need for a

method to universally identify audio-visual material broadcast through IT (analog or

digital) system and to record these in an efficient manner";

-    "when the mode is a first mode ... obtaining the digital content and a mask to

apply to the digital content to obfuscate selected portions of the digital content when the

transmission channel is trusted" '588 explains this in col. 10, lines 18-20 "Thus,

objectionable language may be silenced when the video portion is presented";

-    "obtaining after mask applied data when the transmission channel is not

trusted" and "when the mode is not a first mode, obtaining content after mask applied

data and encrypted masked content"is disclosed in '948 col. 1, lines 43-45 "In this

manner, the se-top terminal receives encrypted transmission and decrypts the programs

that the customer is entitled to, but nothing else";

- "sending obtained data to other entities" disclosed in '948 col. 9 lines 2-3 "transmit the program with the program identifier, p"

- "in the hierarchical content distribution system" disclosed in '948 col. 10 lines 11-12 "Program identifiers, p, are assigned to programs in the topic hierarchy 600 using the potion of prefix masks".

21.   **As to dependent claim 33,** "The method of claim 21, further comprising sending the obtained data to at least one receiver" is disclosed in '948 col. lines col. 9 lines 3-8 "The communication port 230 connects the head-end server 200 to the distribution network 110, thereby linking the head-end server 200 to each connected receiver, such as the set-top terminal 300 shown".

22.   **Claims 4, 10, 15, and 21** as being unpatentable over rejected under 35 U.S.C. 103(a) as being unpatentable over '948 in view of '588, and further in view of Blank, U.S. Patent No. 5,469,536 (hereinafter '536).

23.   **As to dependent claims 4, 10, 15, and 21** The following **is not taught in the combination of '948 and '588** "digital content comprises three dimensional volume data" is shown in '576 col. 14 lines 59-63 "Still alternatively a graphics computer 19 is operated as an input source 2 (not shown) to create a 3-D world model 14a. The computer system includes a digital computer including a central processing unit, memory, communication ports and the like" and the mask comprises a replacement three dimensional region" **however '576 discloses** "where various 3-D digitizer system may be incorporated for entering 3-D shape and contour data into an image processing

computer; a third processing means to manipulate the geometry of subjects comprising the virtual model" in col. 2 lines 26-30.

- It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of teachings in '948 and '588, that explain how content level filtering and censorship occurs in a content distribution system. One of ordinary skill in the art would have been motivated to perform such a modification because the ability to filter the contents of a three dimensional region are needed for sensor fusion of data as disclosed in '536 (see col. 2 lines 10 et seq.) "It is therefore the objective of this invention to provide a more versatile image based panoramic virtual reality and telepresence system and method".

24.   **Claims 5, 11, 16, and 22** rejected under 35 U.S.C. 103(a) as being unpatentable over rejected under 35 U.S.C. 103(a) as being unpatentable over '948 in view of '588, and further in view of Shoff et al., U.S. Patent No. 6,240,555 (hereinafter '555).

25.   **As to dependent claims 5, 11, 16, and 22** The following **is not taught in the combination of '948 and '588** "mask results in replacement of a selected portion of the digital content with a replacement creative component" however "The system and method for presenting interactive entertainment programs is advantageous as it returns the freedom of creativity to the content developer ....the content and the presentation format of how the content and broadcast program are displayed to the view ... No longer is the developer simply developing content to be displayed within a fixed pane that cannot by dynamically altered" is shown in '588 col. 12 lines 24-38.

- It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of teachings in '948 and '588, that explain how content level filtering and censorship occurs in a content distribution system. One of ordinary skill in the art would have been motivated to perform such a modification because creative content editing is a desire strongly desired for those use to interactive digital data streams as disclosed by '555 (see col. 2 lines et seq. 51 and lines 56 et seq.) "Accordingly, the content providers are significantly limited in what they can create in the way of a full interactive media event" and "This invention concerns an interactive entertainment system for supplying interactive supplemental content along with continuous video content programs to viewers".

26.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is (703) 305-8917. The examiner can normally be reached on 6:30 am to 3:30 pm Monday - Thursday and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

NORMAN M. WRIGHT
PRIMARY EXAMINER